



**RE: TEST REPORT FOR HARMFUL CHEMICALS / VOCs**

## Volatile Organic Compounds by Definition

Volatile Organic Compounds (VOCs) are a large group of carbon-based chemicals that easily evaporate at room temperature. While most people can smell high levels of some VOCs, other VOCs have no odor. Odor does not indicate the level of risk from inhalation of this group of chemicals. There are thousands of different VOCs produced and used in our daily lives. Some common examples include:

- Acetone
- Benzene
- Ethylene glycol
- Formaldehyde
- Methylene chloride
- Perchloroethylene
- Toluene
- Xylene
- 1,3-butadiene

The following test report was conducted via a 3<sup>rd</sup> Party and determined no precarious findings according to the kind and extent of tests performed.

## Test Report

Test item:	Three samples of PVC Laminate
Identification:	1) "1460" 2) "1461" 3) "1462"
Condition at delivery:	No claim
Date of delivery:	01.10.2010
Place of testing:	Cologne
Test period:	04.10.2010 to 12.10.2010
Test scope:	Parameters selected by customer
Test results:	There were no precarious findings according to the kind and extent of tests performed. The risk analyses of substances shows that it is not necessary to inform the ECHA according to the EU-regulation 1907/2006 art. 7 and the information responsibility according to art. 33 para. 1 and 2.

Cologne, 12.10.2010

The test results exclusively refer to the samples examined. This report shall not be reproduced except in full without written approval and does not authorize the use of TUV Rheinland Group label.

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**Test Report**

Date:

12.10.2010

Method:

Decomposition according to DIN EN 13346 (common acid decomposition resp. decomposition by microwave)- Qualification of mercury according to DIN EN 1483 and determination of 62 trace elements by ICP-OES resp. ICOMS; DIN EN ISO 1185/DIN EN ISO 17294-2

Sample No.:	2010-68055	
Sample:	1) "TEL 1460"	
Parameter	Unit	Result
Chromium	mg/kg	<10
Lead	mg/kg	<10
Mercury	mg/kg	<1
Arsenic	mg/kg	<5
Cadmium	mg/kg	<5

Sample No.:	2010-68056	
Sample:	2) "TEL 1461"	
Parameter	Unit	Result
Chromium	mg/kg	<10
Lead	mg/kg	<10
Mercury	mg/kg	<1
Arsenic	mg/kg	<5
Cadmium	mg/kg	<5

Sample No.:	2010-68057	
Sample:	3) "TEL 1462"	
Parameter	Unit	Result
Chromium	mg/kg	<10
Lead	mg/kg	<10
Mercury	mg/kg	<1
Arsenic	mg/kg	<5
Cadmium	mg/kg	<5

**Test Report**

Date:

12.10.2010

Method:

In-house method – Determination of selected phthalates after solvent extraction, quantification by GC-MS;

Sample No.:		2010-68055	
Sample:		1) "TEL 1460"	
Parameter	Unit	Result	
Phthalates	-		
Bis-(2-ethylhexyl)phthalate, DEHP	%	<0,025	
Dibutylphthalate, DBP	%	<0,025	
Benzylbutylphthalate, BBP	%	<0,025	
Diisononylphthalate, DINP	%	3,36	
Diisodecylphthalate, DIDP	%	0,59	
Di-n-octylphthalate, DNOP	%	<0,025	
Diisobutylphthalate, DIBP	%	<0,025	

Sample No.:		2010-68056	
Sample:		2) "TEL 1461"	
Parameter	Unit	Result	
Phthalates	-		
Bis-(2-ethylhexyl)phthalate, DEHP	%	<0,025	
Dibutylphthalate, DBP	%	<0,025	
Benzylbutylphthalate, BBP	%	<0,025	
Diisononylphthalate, DINP	%	0,13	
Diisodecylphthalate, DIDP	%	<0,025	
Di-n-octylphthalate, DNOP	%	<0,025	
Diisobutylphthalate, DIBP	%	<0,025	

Sample No.:		2010-68057	
Sample:		3) "TEL 1462"	
Parameter	Unit	Result	
Phthalates	-		
Bis-(2-ethylhexyl)phthalate, DEHP	%	<0,025	
Dibutylphthalate, DBP	%	<0,025	
Benzylbutylphthalate, BBP	%	<0,025	
Diisononylphthalate, DINP	%	4,07	
Diisodecylphthalate, DIDP	%	0,26	
Di-n-octylphthalate, DNOP	%	<0,025	
Diisobutylphthalate, DIBP	%	<0,025	

Quantification equates the DIN EN ISO 18856.

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